Past Performance Sunset Gap Seawater Intrusion Assessment (Attachment 9)

As the groundwater manager of the basin underlying north and central Orange County, the Orange County Water District hydrogeology staff has successfully completed many seawater intrusion/control projects similar in nature to the Sunset Gap Seawater Intrusion Assessment project. These projects include, but are not limited to:

Talbert Seawater Barrier Expansion – Directed design and construction of 21 new multi-depth injection wells to more than double the capacity of the barrier to 30-40 mgd. Source water is highly-treated recycled water from OCWD's Groundwater Replenishment System.

Talbert Seawater Barrier Well Rehabilitation - Evaluated causes of declining injection rates of 81 individual injection wells in operation since 1975. Developed and implemented several programs to mitigate corrosion holes in casing, clogging of perforations and gravel pack, and leakage of injection water to ground surface. Programs included installing casing liners, permeation and jet grouting around casings, and chemical/mechanical well development techniques.

Talbert Gap Groundwater Model - Managed development of groundwater flow model of multiaquifer system within the Talbert Gap, through which sea water can intrude the Orange County groundwater basin. Model was used to estimate impacts to the existing injection well barrier due to proposed additional pumping by city of Newport Beach.

Alamitos Sea Water Barrier Expansion - Determined that additional injection wells were necessary to stop further sea water intrusion around and through the existing network of 35 injection wells spanning the Alamitos Gap between Los Angeles and Orange counties. Nine additional injection wells and three multi-depth monitoring wells were constructed in 1999-2000.

Alamitos Barrier Reclamation Project - Technically reviewed hydrogeologic portion of feasibility study to convert 50% of the injection water to reclaimed water. Regulatory guidelines required that travel times and percentages of injection water be estimated at municipal-supply wells in proximity to the barrier.

OCWD has always successfully accomplished any proposed project funded through state and federal grants in terms of completion schedule, grant administration and various project deliverable documents and reports.

OCWD has not received written performance audits for recent grants (see below) it has received for its various projects. DWR has performed audits on past OCWD projects it has funded and provided OCWD with positive verbal reports on its

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performance and stewardship of DWR-provided funds. OCWD encourages the review panel for this funding opportunity access any records within DWR's exclusive control regarding OCWD's performance on DWR funded grants and loans.

OCWD's commitment to comply with the requirements of funding agencies and full performance of all duties and obligations is evidenced by the multiple competitive funding awards from the same funding agency.

RECENT GRANT FUNDING

- United States Bureau of Reclamation; FY 2000; \$19,5000,000; "Reclamation Wastewater and Groundwater Study and Facility Act of 1992 (P.L. 102-575, Title XI) as amended by the Reclamation Recycling and Water Conservation Act (P.L. 104-266).
- State Water Resources Control Board; FY 2000; \$37,000,000 Proposition 13 Southern California Integrated Watershed Program. (for GWRS)
- ➤ United States Environmental Protection Agency; FY 2001; \$500,000; Appropriations Act of 1999 (P.L. 105-276) 40 CFR Part 31 Federal Assistance Program Water Infrastructure Grant.
- State Water Resources Control Board (California); FY 2002; \$5,000,000; Water Recycling Construction Program.
- State Water Resources Control Board; FY 2000; \$60,000; Proposition 13 Southern California Integrated Watershed Program. (for Dairy Washwater Project)
- Department of Water Resources; FY 2002; \$30,000,000; Safe Drinking
 Water, Clean Water, Watershed Protection and Flood Protection Act (Proposition 13)
 Groundwater Storage Program Construction Grant.
- Metropolitan Water District of Southern California; FY 2003; \$10,000,000; Orange County Groundwater Storage and Conjunctive Use Program.
- State Water Resources Control Board; FY 2007; \$2,352,000; Proposition 50 Integrated Regional Water Management Implementation Grant Program.
- Department of Water Resources; FY 2008; \$641,581; Proposition 50, Urban Drought Assistance Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002.
- Department of Water Resources; FY 2012; \$1,000,000; Proposition 84 Integrated Regional Water Management Implementation Program.

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